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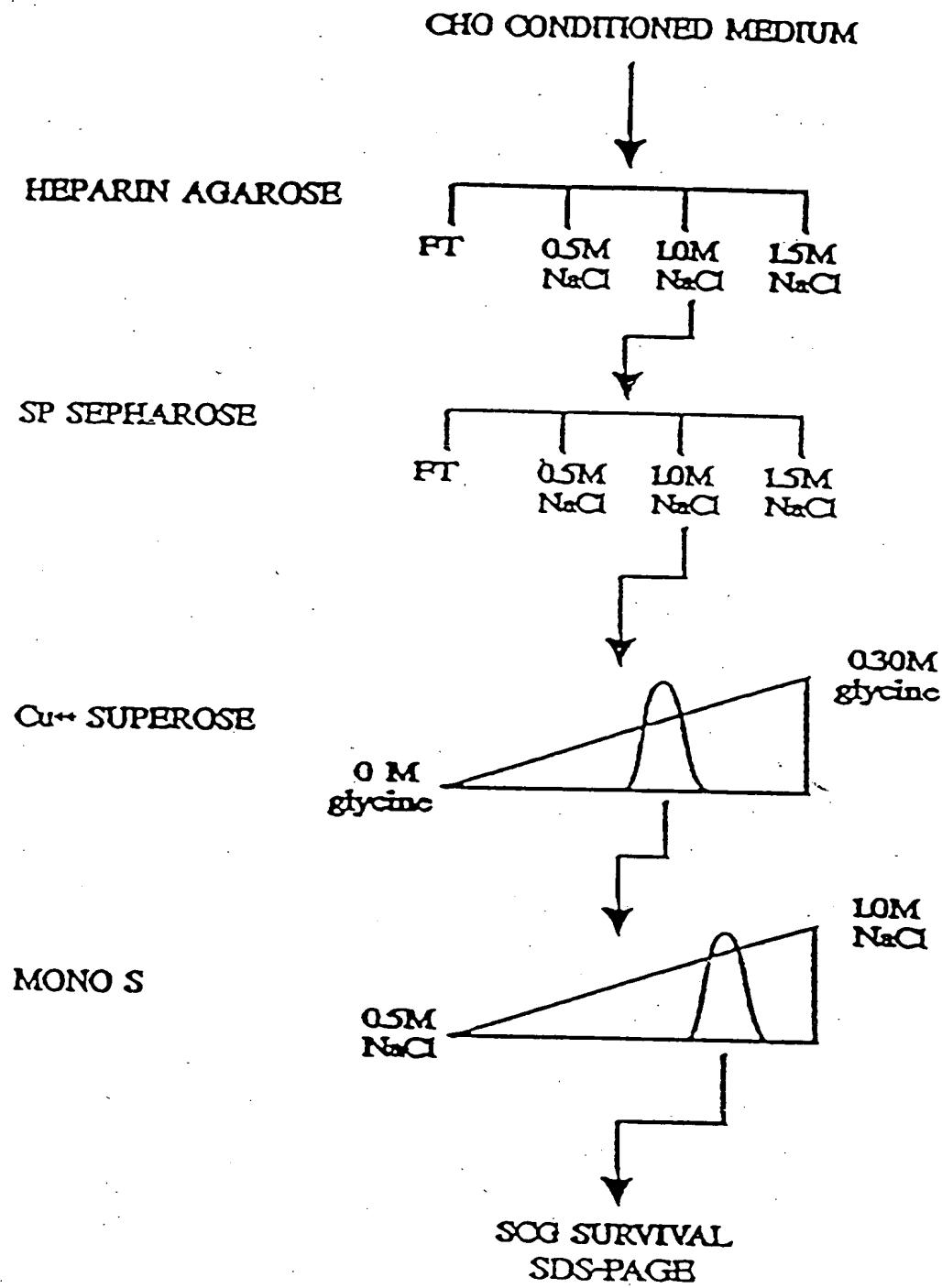


Figure 1

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fraction: M L 21 22 23 24 25 26 27 28 29 30 31 32

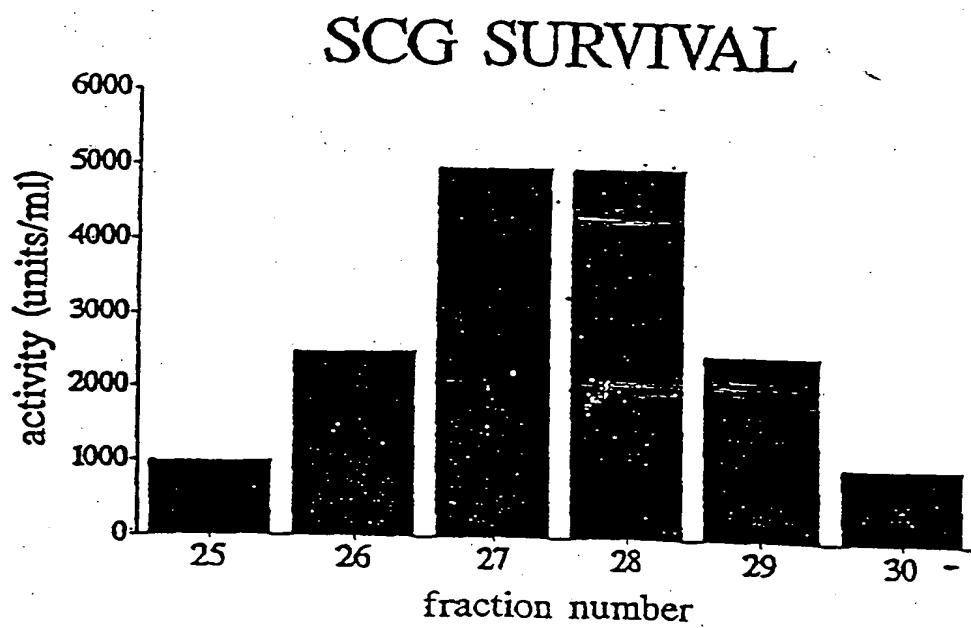
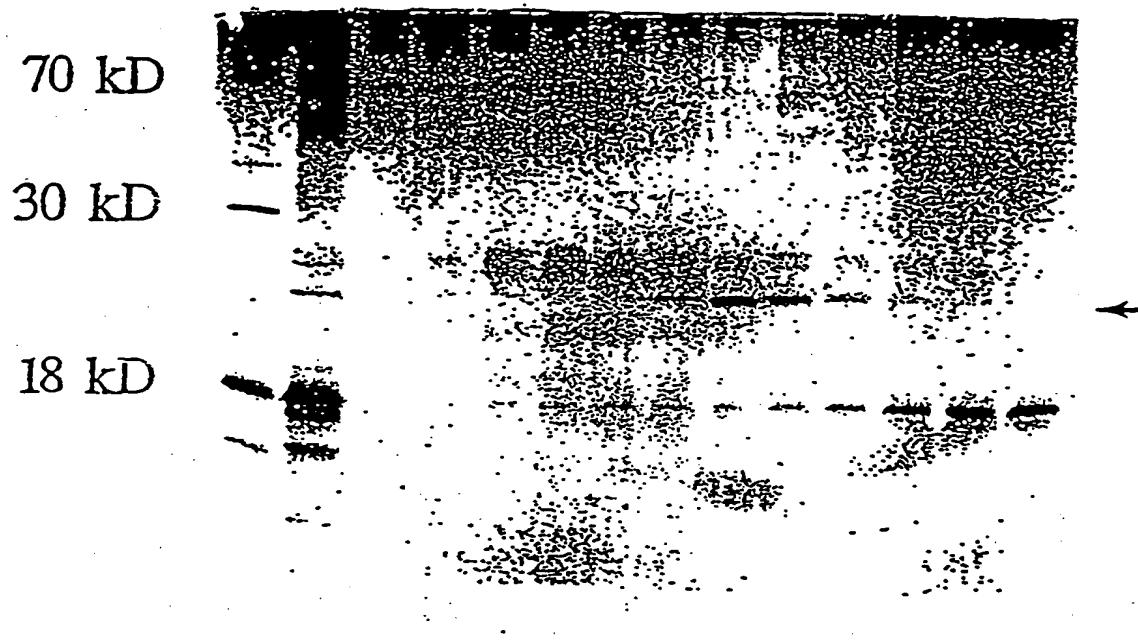
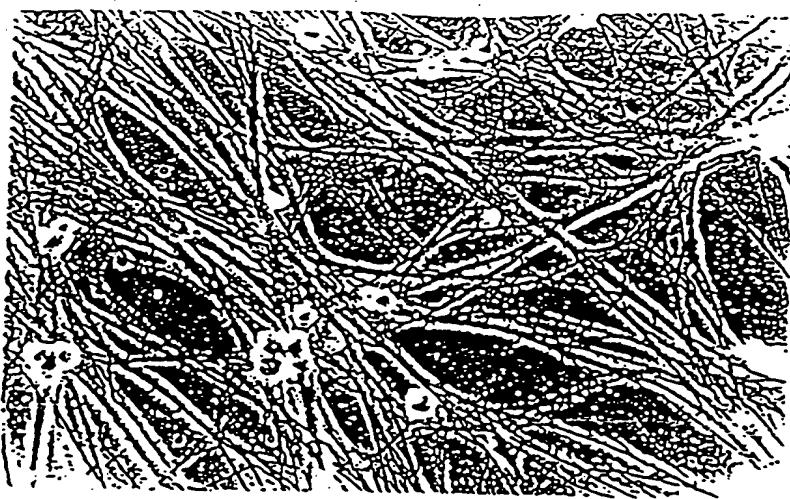


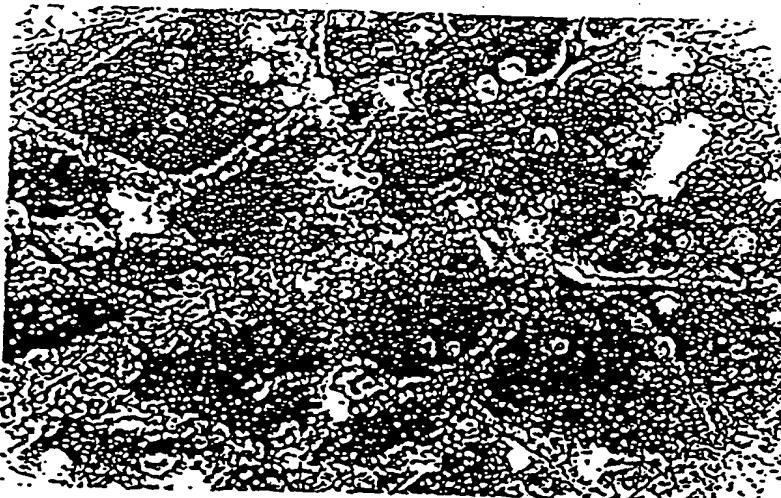
Figure 2

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A) NGF



B) Anti-NGF



C) Anti-NGF

+

Neurturin

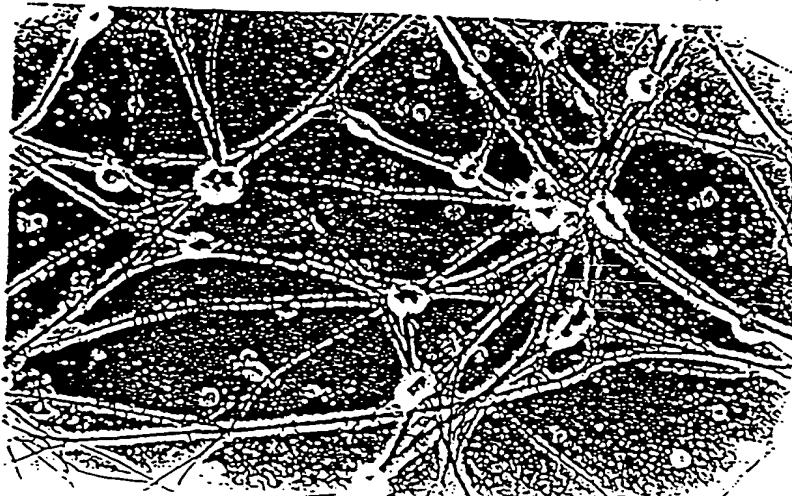


Figure 3

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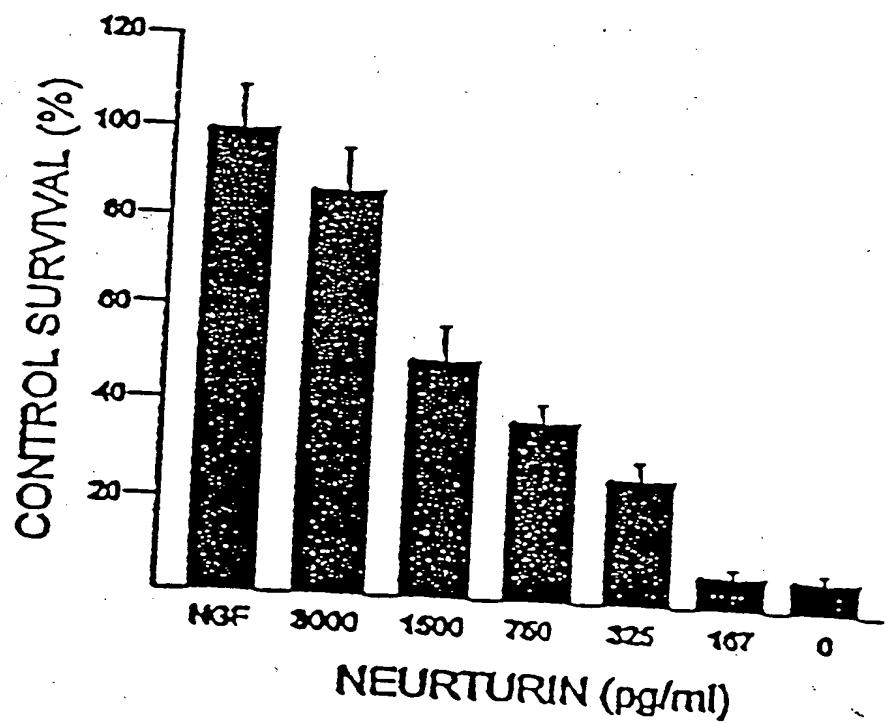


Figure 4

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1	S	P	D	O	K	Q	H	A	V	L	P	R	R	E	R	N	R	Q	A	A	A	A	A	N	P	E	N	S	R	G	K	G	hGDNF				
1	S	P	D	O	K	Q	A	A	A	A	A	P	R	R	E	R	N	R	Q	A	A	A	A	A	S	P	E	N	S	R	G	K	G	mGDNF			
1	S	P	D	O	K	Q	A	A	A	A	A	P	R	R	E	R	N	R	Q	A	A	A	A	A	S	P	E	N	S	R	G	K	G	rGDNF			
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	hNTN				
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	mNTN				
31	R	R	G	Q	R	G	K	N	R	G	C	V	L	T	A	I	H	L	N	V	T	D	L	G	L	G	Y	E	T	K	hGDNF						
31	R	R	G	Q	R	G	K	N	R	G	C	V	L	T	A	I	H	L	N	V	T	D	L	G	L	G	Y	E	T	K	mGDNF						
31	R	R	G	Q	R	G	K	N	R	G	C	V	L	T	A	I	H	L	N	V	T	D	L	G	L	G	Y	E	T	K	rGDNF						
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	hNTN				
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	mNTN				
61	E	E	L	I	F	R	Y	C	S	G	S	C	D	A	A	E	T	T	Y	D	K	I	L	K	N	L	S	R	N	R	hGDNF						
61	E	E	L	I	F	R	Y	C	S	G	S	C	E	S	A	A	E	T	M	Y	D	K	I	L	K	N	L	S	R	S	R	mGDNF					
61	E	E	L	I	F	R	Y	C	S	G	S	C	E	A	A	E	T	M	Y	D	K	I	L	K	N	L	S	R	S	R	rGDNF						
28	E	T	V	L	F	R	Y	C	A	G	A	C	E	A	A	A	A	R	V	Y	D	L	G	L	R	R	L	R	Q	R	R	hNTN					
26	E	T	V	L	F	R	Y	C	A	G	A	C	E	A	A	A	A	R	I	R	Y	D	L	G	L	R	R	L	R	Q	R	mNTN					
91	R	L	V	S	D	K	V	-	G	Q	A	C	C	R	P	I	A	F	D	D	D	D	L	S	F	L	D	D	N	L	V	hGDNF					
91	R	L	T	S	O	K	V	-	G	Q	A	C	C	R	P	V	A	F	D	D	D	D	L	S	F	L	D	D	N	L	V	mGDNF					
91	R	L	T	S	D	K	V	-	G	Q	A	C	C	R	P	V	A	F	D	D	D	D	L	S	F	L	D	D	S	L	V	rGDNF					
58	R	L	R	R	E	R	V	R	A	Q	P	C	C	R	P	T	A	Y	E	D	D	D	D	L	S	F	L	D	D	S	L	V	hNTN				
56	R	V	R	R	E	R	A	R	A	H	P	C	C	R	P	T	A	Y	E	D	D	D	D	L	S	F	L	D	D	V	H	S	R	mNTN			
120	Y	H	I	L	R	K	H	S	A	K	R	C	G	C	I	.																					hGDNF
120	Y	H	I	L	R	K	H	S	A	K	R	C	G	C	I	.																					mGDNF
120	Y	H	I	L	R	K	H	S	A	K	R	C	G	C	I	.																					rGDNF
88	Y	H	T	V	H	E	L	S	A	R	E	C	A	C	V	.																					hNTN
86	Y	H	T	L	Q	E	L	S	A	R	E	C	A	C	V	.																					mNTN

Figure 5

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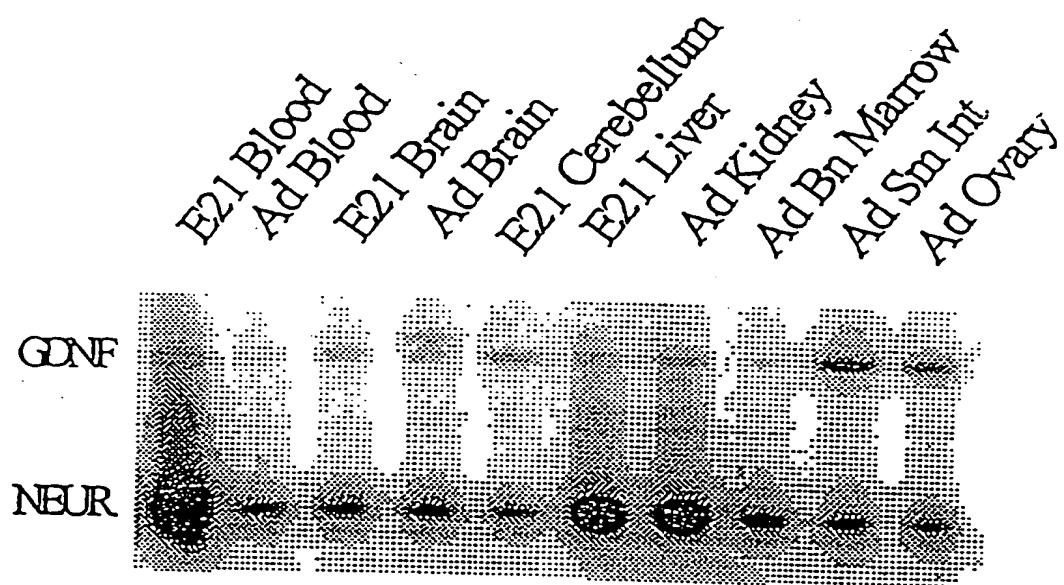


Figure 6

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ATGCAGCGCTGGAAGGCGGCGGCCCTGGCCTCAGTGCCTGCAGCTCCGTGCTGTCCATC 60
Met Gln Arg Trp Lys Ala Ala Ala Leu Ala Ser Val Leu Cys Ser Ser Val Leu Ser Ile
 TGGATGTGTCGAGAGGGCTGCTTCAGCCACCGCCTCGGACCTGCGCTGGTCCCCCTG 120
Trp Met Cys Arg Glu Gly Leu Leu Leu Ser His Arg Leu Gly Pro Ala Leu Val Pro Leu
 CACCGCCTGCCTCGAACCCCTGGACGCCGGATTGCCCGCCTGCCAGTACCGTGCACTC 180
His Arg Leu Pro Arg Thr Leu Asp Ala Arg Ile Ala Arg Leu Ala Gln Tyr Arg Ala Leu
 CTGCAGGGGGCCCCGGATGCGATGGAGCTGCGCGAGCTGACGCCCTGGGCTGGCGGCC 240
Leu Gln Gly Ala Pro Asp Ala Met Glu Leu Arg Glu Leu Thr Pro Trp Ala Gly Arg Pro
 CCAGGTCCGCCGCGTCGGCGGGCCCGGCCGCGCGCGCGCTGCGCGGTTGGGGCG 300
Pro Gly Pro Arg Arg Arg Ala Gly Pro Arg Arg Arg Arg Ala Arg Ala Arg Leu Gly Ala
 CGGCCCTTGCAGGGCTGCGCGAGCTGGAGGTGCGCGTGAGCGAGCTGGCCTGGCTACGCG 360
Arg Pro Cys Gly Leu Arg Glu Leu Glu Val Arg Val Ser Glu Leu Gly Leu Gly Tyr Ala
 TCCGACGAGACGGTGCTTCCGCTACTGCGCAGGCCCTGCGAGGCTGCCGCGCGTC 420
Ser Asp Glu Thr Val Leu Phe Arg Tyr Cys Ala Gly Ala Cys Glu Ala Ala Arg Val
 TACGACCTCGGGCTGCGACGACTGCGCCAGCGGCCGCGCTGCGCGGGAGCGGGTGC 480
Tyr Asp Leu Gly Leu Arg Arg Leu Arg Gln Arg Arg Arg Leu Arg Arg Glu Arg Val Arg
 GCGCAGCCCTGCTGdCGdCCGACGGCCTACGAGGACGAGGTGTCCTTCCTGGACGCGCAC 540
Ala Gln Pro Cys Cys Arg Pro Thr Ala Tyr Glu Asp Glu Val Ser Phe Leu Asp Ala His
 AGCCGCTACCACACGGTGCACGAGCTGTCGGCGCGAGTGCACCTGCGTGTGA 594
Ser Arg Tyr His Thr Val His Glu Leu Ser Ala Arg Glu Cys Ala Cys Val

Figure 7

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ATGAGGCGCTGGAAGGCAGCGGCCCTGGTGTGCTCATCTGCAGCTCCCTGCTATCTGTC 60
Met Arg Arg Trp Lys Ala Ala Ala Leu Val Ser Leu Ile Cys Ser Ser Leu Leu Ser Val
 TGGATGTGCCAGGAGGGTCTGCTCTGGGCCACCGCCTGGGACCCGCGCTGCCCGCTA 120
Trp Met Cys Gln Glu Gly Leu Leu Leu Gly His Arg Leu Gly Pro Ala Leu Ala Pro Leu
 CGACGCCCTCCACGCACCTGGACGCCGCATGCCCGCTGGCCAGTATCGCGCTCTG 180
Arg Arg Pro Pro Arg Thr Leu Asp Ala Arg Ile Ala Arg Leu Ala Gln Tyr Arg Ala Leu
 CTCCAGGGGCCCGACGGTGGAGCTTCGAGAACTTCTCCCTGGGCTGCCGCATC 240
Leu Gln Gly Ala Pro Asp Ala Val Glu Leu Arg Glu Leu Ser Pro Trp Ala Ala Arg Ile
 CCGGGACCGCGCCGTCGAGCGGGTCCCCGGCGTCGGCGGGCGCGGCCGGGGCTCGGCCT 300
Pro Gly Pro Arg Arg Ala Gly Pro Arg Arg Arg Ala Arg Pro Gly Ala Arg Pro
 TGTGGGCTGCGCGAGCTGAGGTGCGCGTGAGCGAGCTGGCCTGGCTACACGTCGGAT 360
Cys Gly Leu Arg Glu Leu Glu Val Arg Val Ser Glu Leu Gly Leu Gly Tyr Thr Ser Asp
 GAGACCGTGCTTCCGCTACTGCGCAGGGCGTGCAGAGCGGCCATCCGCATCTACGAC 420
Glu Thr Val Leu Phe Arg Tyr Cys Ala Gly Ala Cys Glu Ala Ala Ile Arg Ile Tyr Asp
 CTGGGCCTTCGGCGCTGCGCCAGCGGAGGCGCTGCGCAGAGAGCGGGCGCGCAC 480
Leu Gly Leu Arg Arg Leu Arg Gln Arg Arg Val Arg Arg Glu Arg Ala Arg Ala His
 CCGTGGTGTGCGCCGACGGCCTATGAGGACGAGGTGTCCTGGACGTGCACAGCCGC 540
Pro Cys Cys Arg Pro Thr Ala Tyr Glu Asp Glu Val Ser Phe Leu Asp Val His Ser Arg
 TACCAACACGCTGCAAGAGCTGCGCGGGAGTGCACGTGCGTGTGA 588
Tyr His Thr Leu Gln Glu Leu Ser Ala Arg Glu Cys Ala Cys Val

Figure 8

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GGAGGGAGAGCGCGCGGTGGTTCGTCCGTGTGCCCGCGCCGGCGC	-301
TCCTCGCGTGGCCCGCGTCCTGAGCGCGCTCCAGCCTCCCACCGCGCGC	-251
ACCCCGGGTTCACTGAGCCCGCGAGCCCGGGGAAGACAGAGAAAGAGA	-201
GGCCAGGGGGGAACCCCATTGGCCCGGCCGTGTCCCACCCGTGCGG	-151
TGGCCTCCTCCGGCACGGGTCCCCGGTCGCCTCCGGTCCCCGCGATCC	-101
GGATGGCGCACGCAGTGGCTGGGCCGGCGGCTCGGTGGTCGGAGG	-51
AGTCACCACTGACCGGGTCATCTGGAGCCGTGGCAGGCCGAGGCCAGG	-1
<u>ATGAGGCGCTGGAAGGCAGCGGCCCTGGTGTGCGCTCATCTGCAGCTCCCT</u>	50
<u>GCTATCTCTGGATGTGCCAGGAGGGTCTGCTCTTGGGCCACCGCCTGG</u>	100
<u>GACCCCGCGCTTGCCTCGCTACGACGCCCTCCACGCACCCCTGGACGCCGC</u>	150
<u>ATCGCCCGCCTGGCCAGTATCGCGCTCTGCTCCAGGGCGCCCCGACGC</u>	200
<u>GGTGGAGCTTCGAGAACTTCTCCCTGGCTGCCGCATCCGGGACCGC</u>	250
<u>GCCGTGAGCGGGTCCCCGGCTGGCGGGCGCCGGGGCTCGGCCT</u>	300
<u>TGTGGCTGCGCGAGCTCGAGGTGCGCGTGAGCGAGCTGGCCTGGCTA</u>	350
<u>CACGTGGATGAGACCGTGCTGTTCCGCTACTGCGCAGGCGCGTGCAGG</u>	400
<u>CGGCCATCCGCATCTACGACCTGGCCTCGCGCCTGCCAGCGGAGG</u>	450
<u>CGCGTGCAGAGAGAGCGGGCGCGGGCACCCGTGTTGCGCCGACGGC</u>	500
<u>CTATGAGGACGAGGTGTCCTTCCCTGGACGTGACAGCCGCTACCAACACGC</u>	550
<u>TGCAAGAGCTGCGCGGGAGTGCAGCGTGCAGTGTGATGCTACCTCACG</u>	600
<u>CCCCCGACCTGCGAAAGGGCCCTCCCTGCCGACCCCTCGCTGAGAACTGA</u>	650
<u>CTTCACATAAAGTGTGGGAACTCCC</u>	675

Figure 9

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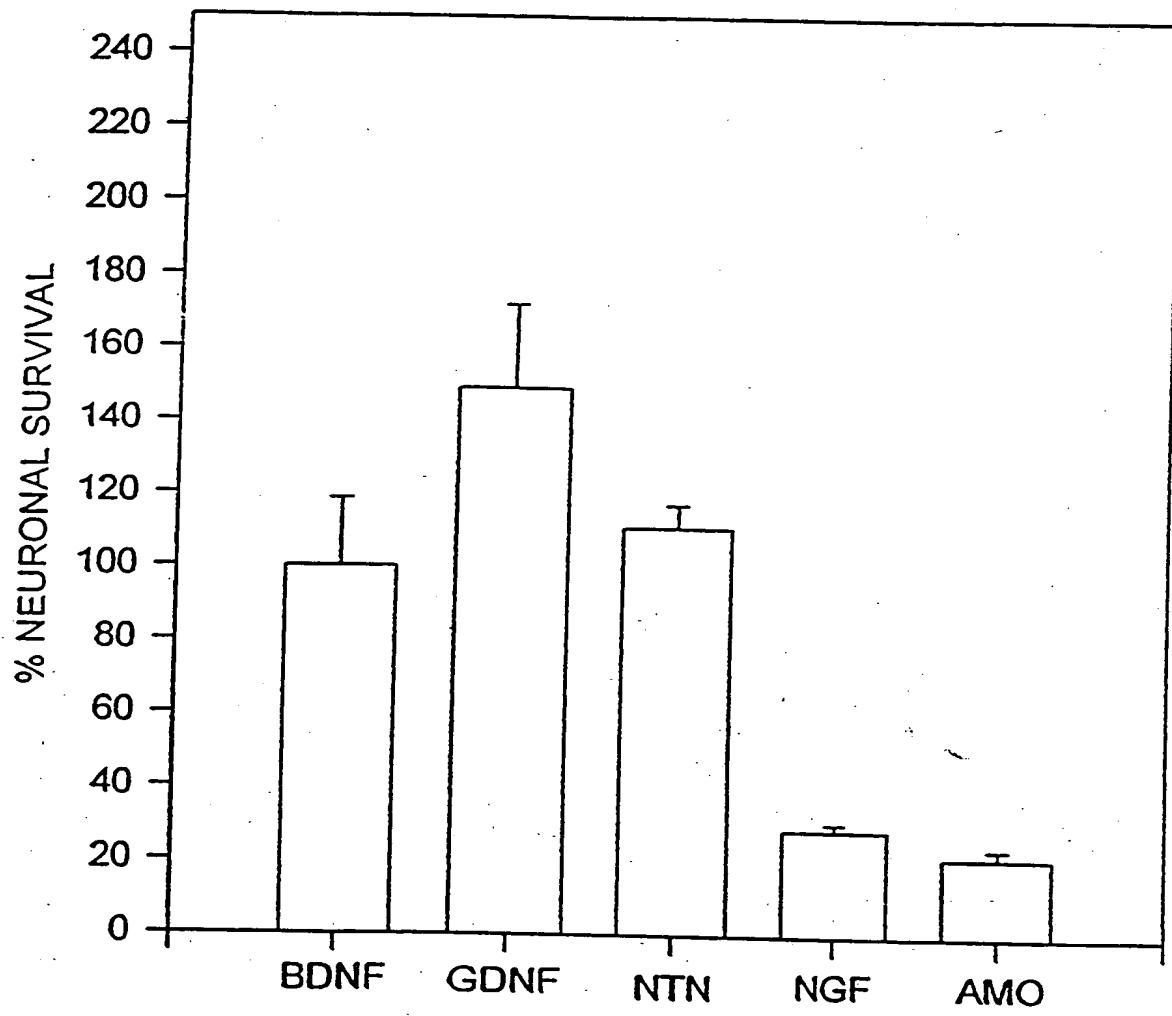


Figure 10

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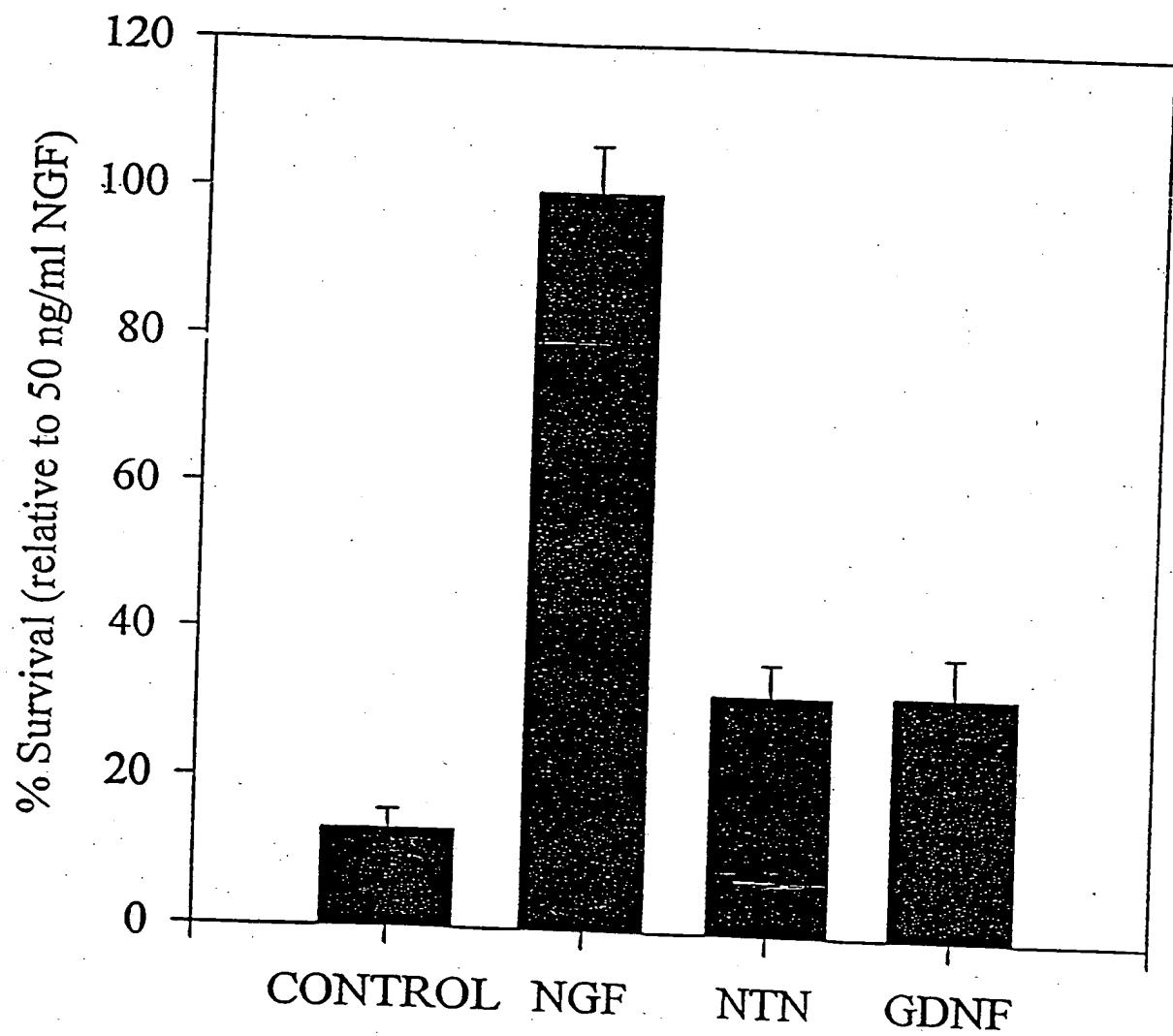


FIGURE 11

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1 2 3 4 5 6

FIGURE 12A



FIGURE 12B



GDNF

Neufrutrin

Control

NGF

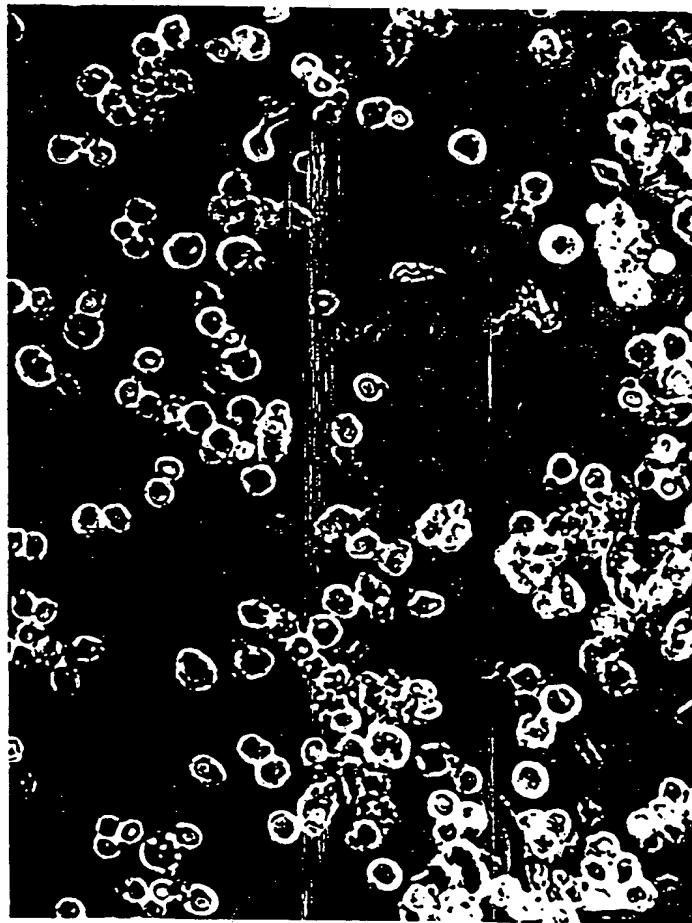
ERK-2

P-ERK-2

-ERK-1
-ERK-2-ERK-1
-ERK-2

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FIGURE 13 A. Untreated



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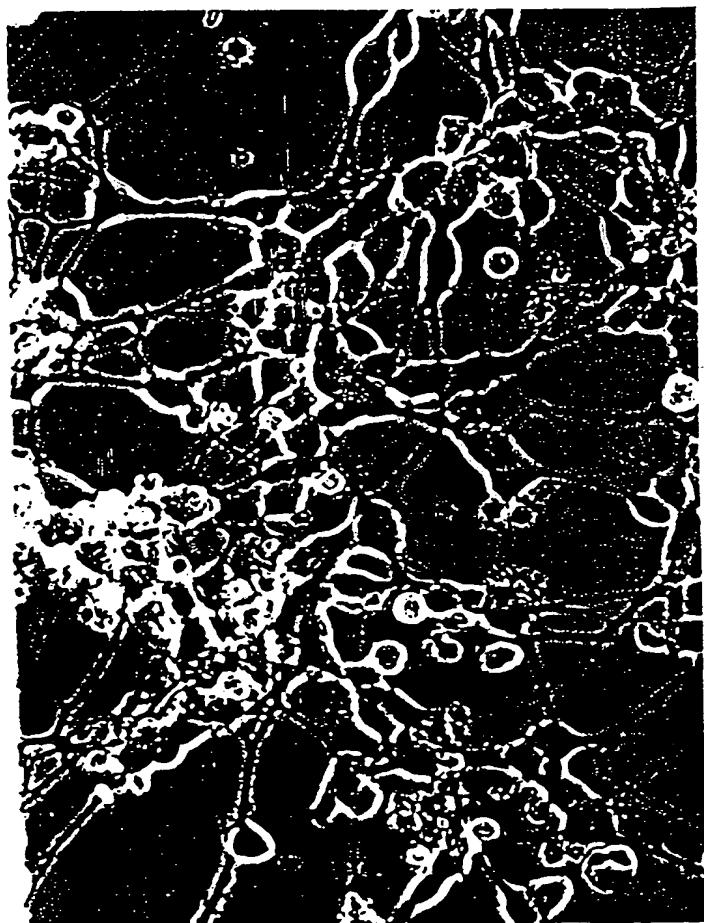


FIGURE 13 B. Neurturin-treated

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MAPK Response in Neuroblastoma Cell Lines

SK-NSH Neuroblastoma (naive)

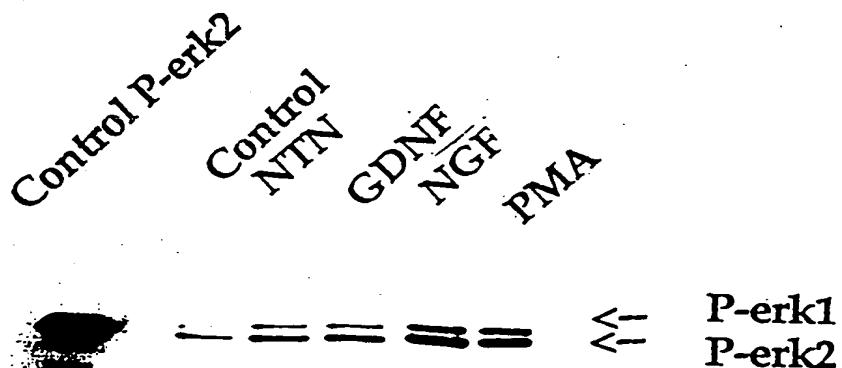


FIGURE 14A

FIGURE 14B NGP Neuroblastoma (RA tx)

Control
NTN
GDNF
NGF
PMA

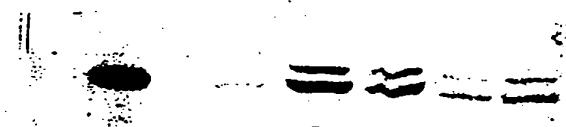
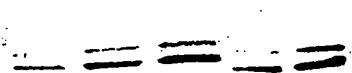


FIGURE 14C SY5Y Neuroblastoma (RX tx)

Control
NTN
GDNF
NGF
PMA



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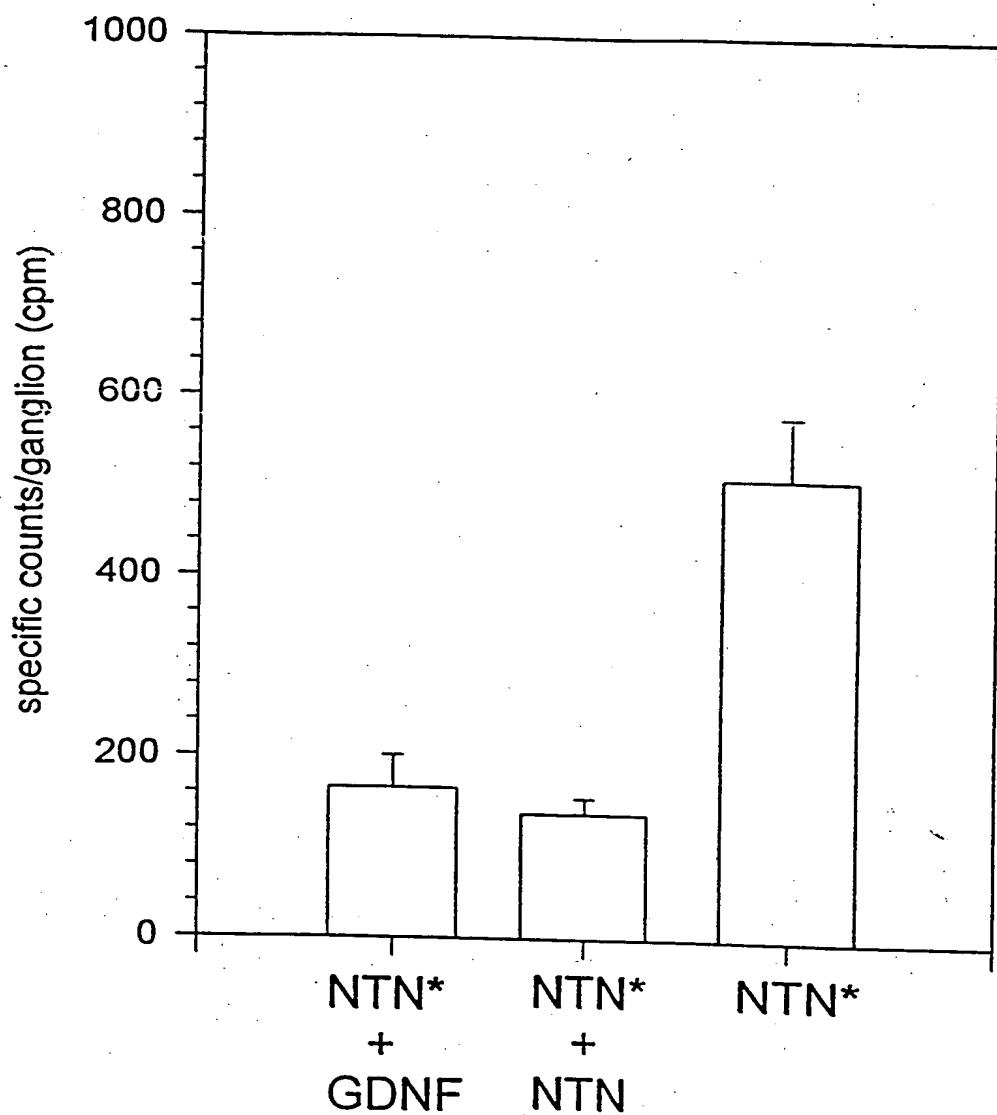


FIGURE 15

SEQ	GROWTH ID	FACTOR NO:	SEQUENCE
134	TGFβ1	CCVROLYIDFRKDLGWK-WIHEPKGYHANEFLGCPYIWSLDT-----	QYSKVLALLNQHNPAGASA - PCCV -- PQALEPLPIVTVYGRKPKV -- EQLSNMIVRSCKCS
135	TGFβ2	CCLRPLYIDFKRDLGWK-WIHEPKGYANFCAGACPYLWSSDT-----	QHSRVLISLYNTINPEASAS - PCCV -- SQDLEPLTILYIGKTPK1 -- EQLSNMIVKSCKCS
136	TGFβ3	CCVRPLYIDFRDLGWK-WIHEPKGYANFCAGACPYLRSADT-----	THSTVIGLJYNTLNPEASAS - PCCV -- PQDLEPLTILYIGKTPK1 -- EQLSNMIVKSCKCS
137	INHβA	CKKKQFFVFSK-DIGWNDWIAPIGSHIAG-TSGSSLFHFSTVINYMRGH;PFAANLKSCCV--PTKLRPMSMLYDDGQNL1-KKDIONMIVEECGCS	17/19 CCRQQFFIDFR-LIGWNDWIAPIGTYGYGNYCEGSCSCPAYLAG-VEGSSASFHTAVVNVQYMRGLNF-GTVNSCC1--PTKLSTMSMLYFDEYNIV-KDVPNMIVEECGCA
138	INHβB	CRRVKFQVDFN-LIGWGSWIIXPQKNAYRCGECPNPVGEEFHP-----	PTKTKPLSMLYVDNGR - VILLEHHKDMIVEECGCL CRRHPLVDFS-DVGWNDWIVAPPGYHAFYCHGECPPFLADHLIST-----NHAIVQTLVNSVNS-K-IPKACCV--PTELSAISMLYLDENEKVLK-NYQDMVVEGCCR
139	NODAL	CRRHSLYVDFS-DVGWNDWIVAPPGYHAFYCHGECPPFLADHLIST-----NHAIVQTLVNSVNS-S-IPKACCV--PTELSAISMLYLDENEKVLK-NYQDMVVEGCCR	
140	BMP2	CRRHSLYVDFS-DVGWNDWIVAPPGYHAFYCHGECPPFLADHLIST-----NHAIVQTLVNSVNS-S-IPKACCV--PTELSAISMLYLDENEKVLK-NYQDMVVEGCCR	
141	BMP4	DPP CRRHSLYVDFS-DVGWDDWIVAPLGYDAYCHGKCPFLADHFNST-----NHAIVQTLVNSVNS-S-IPKACCV--PTELSAISMLYLDENEKVLK-NYQDMVVEGCCR	
142	BMP5	CKKHELYVSFR-DLGWQDWIIAPEGYAAYCQDGECSFPLNAHMNAT-----NHAIVQTLVNSVNS-S-IPKACCV--PTQLDSVAMLYLNDQSTTVLK-NYQEMTUVGCCR	
143	BMP6	CRKHELYVSFO-DLGWQDWIIAPEGYAAYCQDGECSFPLNAHMNAT-----NHAIVQTLVNSVNS-S-IPKACCV--PTQLDSVAMLYLNDQSTTVLK-NYQEMTUVGCCR	
144	BMP7	CKKHELYVSFR-DLGWQDWIIAPEGYAAYCQDGECSFPLNAHMNAT-----NHAIVQTLVNSVNS-S-IPKACCV--PTQLDSVAMLYLNDQSTTVLK-NYQEMTUVGCCR	
145	BMP8	CKKHELYVSFR-DLGWQDWIIAPEGYAAYCQDGECSFPLNAHMNAT-----NHAIVQTLVNSVNS-S-IPKACCV--PTQLDSVAMLYLNDQSTTVLK-NYQEMTUVGCCR	
146	60A	CRRHELYVSFO-DLGWHDWIIAPEGQSYAYCEGECSPFLDSCMNT-----NHAIVQTLVNSVNS-S-IPKACCV--PTQLDSVAMLYLNDQSTTVLK-NYQEMTUVGCCR	
147	BMP3	COMOTLYIDFK-DLGWHDWIIAPEGQSYAYCEGECSPFLDSCMNT-----NHAIVQTLVNSVNS-S-IPKACCV--PTQLDSVAMLYLNDQSTTVLK-NYQEMTUVGCCR	
148	VG1	CARRYLVDFA-DIGWSEWIIISPKSFDAYCSCGACQFPMPKSLKPS-----NHAIVQTLVNSVNS-S-IPKACCV--PTQLDSVAMLYLNDQSTTVLK-NYQEMTUVGCCR	
149	GDF1	CKKRHLYVEFK-DYGWQNWVIAPQGYMANYCYGECPYPLTEILNGS-----NHAIVQTLVNSVNS-S-IPKACCV--PTQLDSVAMLYLNDQSTTVLK-NYQEMTUVGCCR	
150	GDF3	CRARRLYVSFR-EVGWHRWVIAPRGFLANYCQGQCALPVALSGSGPPALNHAVRALMHALAAGA-ADLPCCV--PARLSPISVLFPTDSNDNVVLR-QYEDMVDECGCR	
150	DORSLN	CHRHLQFLINFO-DLGWHHKWVIAPKGFMANYCHGECCPMSMTYLNSS-----NFAFMQALMFMADP-K-VPKAVCV--PTKLSPISMLYQDDSDKNVLR-HYEDMVDECGCR	
152	INHa	CRRTSLHVNFK-BIGMDSWIIAPKDYEAEFKGGCFPLTDNVTPT-----KHAIVQTLVNSVNS-S-IPKACCV--PTKLDAISILYKDDAGVPTLIIYNGMVAECGCR	
153	MIS	CHRVALNISF-QELGWERWIVYPPSFIFHYCHGGCGLHIPPNLSPVPGAPPTPAQPSLL-----PGAQPCCALPGTMPLHVRTTSDDGYSFKYETVPLNLLTOHCACI	
154	GDF9	CALRELSDVIRERS-----VLIPETYQANNCQAGCWPQSDR-----NPRYGNHVVLLKMQARGATLARPPCCV--PTAYT-GKLILISSEERISAHVNPVMATECGCR	
155	GDNF	CELHDFSLFS-QLKWDNWIAPHSYNPSYCKGDCPSAVSHRYGSPV-----HTWYQNMIE-KLDPSVPSPSCV--PGKYSPLSVLTIEPDGSIAYK-EYEDMMATSCTR	
156	NTN	CVLTAILNVT-DLGIG--YETKEELIPIRCGSCD-AAETTYDKILKNLSRN-----RRLVSDKV-GOACCRPIAFD-DDLSFL----DDNLVYHILRKHSAKRCGI	
157	CGLRELEVRVS-ELGLG--YASDETVLFRYÇAGACE-AAARVYDGLRLRRQR-----RRLRRERVRAQPCCRPTAYE-DEVSFL----DAHSRXYHTVHLSARECACV		

FIGURE 16

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SEQ NO:	GROWTH FACTOR ID	SEQUENCE
86	TGF β 1	CCVRQLYIDFRKDLGWK-WIHEPKGYHANFCLGPCPYIWSDLT-----QYSKVULALYNQHNPAGSAA-P
87	TGF β 2	CCLRPLYIDFKRDLGWK-WIHEPKGYHANFAGACPYLWSSDT-----QHSRVVLSLYNTINPEASAS-P
88	TGF β 3	CIVRPLYIDFRQDLGWK-WIHEPKGYYANFCGSGCPYIYRSADT-----TISITVLGLYNTINPEASAS-P
89	INH β A	CCKKQFFVFSFK-DIGWNDWIIAPSGYHANYCEGECPSHIAJ-TSGSSLSEFHSTVYINHYMRGHSPFANLKS
90	INH β B	CCRQQFFIDFR-LIGWNDWIIAPTGYYGNYCEGSCPSYIYPKQYNAVRCEGECPCPNPGEEFHP-----NHAYIQSLLKRYQPHR-VPST
91	NODAL	CRRVKFQVDFN-LIGWGSWIIYPKQYNAVRCEGECPCPNPGEEFHP-----NHAYIQSLLKRYQPHR-VPST
92	BMP2	CKRHPLYYVDFS-DVGWNDWIVAPPGYHAFYCHGECPCPFPLADHNST-----NHAIYQTLLVNSVNS-K-IPKA
93	BMP4	CRRHSLYYVDFS-DVGWNDWIVAPPGYQAFYCHGDCPFPFLADHNST-----NHAIYQTLLVNSVNS-S-IPKA
94	DPP	CRRHSLYYVDFS-DVGWDDWIVAPLGYDAYCHGKCPFLADHNST-----NHAVVQTLLVNNNNPGK-VPKA
95	BMP5	CKKHELYVSFR-DLGWQDWIIAPEGYAAFYCDGECSFPLAHMNAT-----NHAIYQTLLVHLMFPDH-VPKP
96	BMP6	CRKHLYVSFO-DLGWQDWIIAPKGYAANYCDGECSFPLAHMNAT-----NHAIYQTLLVHLMNPEY-VPKP
97	BMP7	CKKHELYVSFR-DLGWQDWIIAPEGYAAYYCEGECAFPNSYMNAT-----NHAIYQTLLVHFINPTE-VPKP
98	BMP8	CRRHLYVSFO-DLGWLDDWIVIAFPQGSAYCEGECSFPLDSCMNA-----NHAIQSLVHLMKPNAA-VPKA
99	60A	CQMOTLYIDFK-DLGWHWDWIIAPKGFLYAFYCGECNFPLAHMNAT-----NHAIYQTLLVHLLPEKK-VPKP
100	BMP3	CARRYLVDFA-DIGLSEWEWISPKSFDAYCSCGACQFMPKSLKPS-----NATIQSIIVAVGVVPGIPEP
101	VG1	CKKRHLYVEFK-DVGWQDNWIVIAPOQGYMANYCEGCPYIPLTEILNGS-----NHAIQSLVHLSIEPED-IPLP
102	GDF1	CRARRLYVSFR-EVGWHRWIVIAPRGFLANYCQQCQALPVASGSGGPPALNHAVRLALMHAAPGA-ADLP
103	GDF3	CHRHQLFINFO-DLGWQKWWIVIAPKGFMANYCHGRCPPFSMTTYLNSS-----NYAFMQALMHMADP-K-VPKA
104	DORSLN	CRRTSLHWNFK-EIGWDSWIIAPKDYEAEFKGGCFPLDNTFT-----KHAIVQTLLVHQNPKK-ASKA
105	INHa	CHRVALNISFQELGWERWIVVPPSFIFHCHGGCGLJHIPPNLSPVPGAPPPTPAQPSYL-----PGAQP
106	MIS	CALRELSVDLRAERS-----VLIPETYQANNCQGACGWPQSDR-NPRYGNHVVILLKMQARGATLARPP
107	GDF9	CELHDFSLSF-QLKWDNWIVAPHSYNPSYCKGDCPSA9SHRYGSPV-----HTMVQNMIE-YKDPSPVSP
108	GDNF	CVLTAIHLNVT-DLGIG-----YETKEELIYFRCGSGCD-AEFTTYDKILKANLSR-----PRLVSDKV-GQA
109	NTN	CGLRELEVRVS-ELGLG-----YASDETVLFRYAGACE-AAARVYDGLRRLRQR-----RRLLRRERVRAQP

FIGURE 17

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SEQ	ID	GROWTH	NO:	FACTOR	SEQUENCE
110	TGF β 1	CCV--PQALEPLPIVYYVGRKPKV--EQLSNMIVRSCKCS			
111	TGF β 2	CCV--SQDLEPLTILYYIGKTPKI--EQLSNMIVKSCKCS			
112	TGF β 3	CCV--PQDLEPLTILYYVGRTPKV--EQLSNMVVKSCCKCS			
113	INH β A	CCV--PTKLRPMSMLYYDDGQNII-KKDIQNMIVEECGCS			
114	INH β B	CCI--PTKLSTMSMLYFDDEYNIV-KRDVPNMIVEECGCA			
115	NODAL	CCA--PVTKPLSMLYVDNGR--VLLEHHKDMIVEECGCL			
116	BMP2	CCV--PTELSAISMLYLDENEKVVLK-NYQDMVVECGCGR			
117	BMP4	CCV--PTELSAISMLYLDEYDKVVLK-NYQEMVVECGCGR			
118	DPP	CCV--PTQLDSVAMLYLNDQSTVVLK-NYQEMTVVGCGR			
119	BMP5	CCA--PTKLNAISVLYFDDSSNVILK-KYRNMVVRSCGCH			
120	BMP6	CCA--PTKLNAISVLYFDDNSNVILK-KYRNMVVRACGCH			
121	BMP7	CCA--PTQLNAISVLYFDDSSNVILK-KYRNMVVRACGCH			
122	BMP8	CCA--PTKLSATSVLYYDSNNVILR-KHRNMVVKACGCH			
123	60A	CCA--PTRLGALPVLYHLNDENVNLK-KYRNMIVKSCGCH			
124	BMP3	CCV--PEKMSSLSILFFDENKNVVLKV-YPNMTVESACR			
125	VG1	CCV--PTKMSPIISMLFYDNNDNVLR-HYENMAVDECGR			
126	GDF1	CCV--PARLSPISVLFFDNSDNVVLR-QYEDMVDECGR			
127	GDF3	VCV--PTKLSPISMLYQDSDKNVILR-HYEDMVDECGR			
128	DORSLN	CCV--PTKLDAISILYKDDAGVPTLIYNYEGMKVAECGCR			
129	INH α	CCAALPGTMRPLHVRTTSDGGYSFKYETVPNLLTQHCACI			
130	MIS	CCV--PTAYT--GKLLISLSEERISAHVPMVATECGCR			
131	GDF9	SCV--PGKYSPLSVLTIEPDGSIAYK-EYEDMMATSCTCR			
132	GDNF	CCRPIAFD-DDLSFL-----DDNLVYHILRKHSAKRCGCI			
133	NTN	CCRPTAYE-DEVSFL-----DAHSRYHTVHELSARECACV			

FIGURE 18